Family list
37 family members for:
WO9805641
Derived from 31 applications.

21 **FLUORINATED 1,4-BISUBSTITUTED PIPERIDINE DERIVATIVES**
Publication info: **KR2000022214 A** - 2000-04-25

22 **FLUORINATED 1,4-DISUBSTITUTED PIPERIDINE DERIVATIVES**
Publication info: **NO990472 A** - 1999-02-01
NO990472D D0 - 1999-02-01

23 **Fluorinated 1,4-disubstituted piperidine derivatives, preparation and use as M3 receptor inhibitors**
Publication info: **NZ333842 A** - 2001-05-25

24 **FLUORINE CONTAINING 1,4-SUBSTITUTED DERIVATIVES OF PIPERIDINE**
Publication info: **PL331431 A1** - 1999-07-19

25 **FLUORINATED 1,4-DISUBSTITUTED PIPERIDINE DERIVATIVES**
Publication info: **SK12299 A3** - 2000-05-16

26 **FLUORINATED 1,4-DISUBSTITUTED PIPERIDINE DERIVATIVES**
Publication info: **TR9900204T T2** - 2000-01-21

27 **FLUORINATED 1,4-DISUBSTITUTED PIPERIDINE DERIVATIVES**
Publication info: **TR200001482T T2** - 2000-11-21

Already cited

28 **Fluorine-containing 1,4-disubstituted piperidine derivatives**
Publication info: **US5948792 A** - 1999-09-07

29 **Fluorine-containing 1, 4-disubstituted piperidine derivatives**
Publication info: **US6040449 A** - 2000-03-21

30 **FLUORINATED 1,4-DISUBSTITUTED PIPERIDINE DERIVATIVES**
Publication info: **WO9805641 A1** - 1998-02-12

31 **Fluorinep-containing 1,4-disubstituted piperidine derivatives**
Publication info: **ZA9706813 A** - 1998-02-11

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(71) 出願人（米国を除くすべての指定国について）
萬有製薬株式会社
(BANYU PHARMACEUTICAL CO., LTD.)[JP/JP]
〒103 東京都中央区日本橋本町2丁目2番3号 Tokyo, (JP)
(72) 発明者；および
(75) 発明者／出願人（米国についてのみ）
土谷義己(TSUCHIYA, Yoshimi)[JP/JP]
大沢浩一(OHSAWA, Hirokazu)[JP/JP]
川上久美子(KAWAKAMI, Kumiko)[JP/JP]
大脇健二(OHWAKI, Kenji)[JP/JP]
錦辺 優(NISHIKIBE, Masaru)[JP/JP]
〒300-26 茨城県つくば市大久保3番地
萬有製薬株式会社 つくば研究所内 Ibaraki, (JP)
野本貴史(NOMOTO, Takashi)[JP/JP]
〒360-02 埼玉県大里郡妻沼町大字西城810番地
萬有製薬株式会社 開発研究所内 Saitama, (JP)

(81) 指定国 AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO特許 (GH, KE, LS, MW, SD, SZ, UG, ZW), ユーラシア特許 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧州特許 (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI特許 (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

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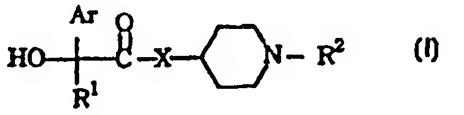
(54)Title: FLUORINATED 1,4-DISUBSTITUTED PIPERIDINE DERIVATIVES

(54)発明の名称 含フッ素1,4－ジ置換ピペリジン誘導体



(I)

(57) Abstract

Novel fluorinated 1,4-disubstituted piperidine derivatives represented by general formula (I) or pharmaceutically acceptable salts thereof, wherein Ar represents aryl or heteroaryl having 1 or 2 heteroatoms selected from the group consisting of nitrogen, oxygen and sulphur in which one to three hydrogen atoms on the aryl or heteroaryl ring may be substituted by lower alkyl, etc.; R^1 represents C_{1-3} cycloalkyl in which one to four arbitrary hydrogen atoms may be substituted by fluorine; R^2 represents saturated or unsaturated, aliphatic C_{5-15} hydrocarbon in which one to six arbitrary hydrogen atoms may be substituted by fluorine, aralkyl, arylalkenyl, or heteroarylalkyl or heteroarylalkenyl having one or two heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur, in which one to three hydrogen atoms on the aralkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl ring may be substituted by lower alkyl, trifluoromethyl, cyano, hydroxy, nitro, lower alkoxycarbonyl, halogeno, lower alkoxy, amino, etc.; and X represents O or NH, provided that at least one of R^1 and R^2 has one or more fluorine atoms. Because of having selective muscarinic receptor antagonism and being excellent in oral activity, persistence of the action and dynamic *in vivo*, these compounds are useful as efficacious and safe remedies or preventives with little side effects for respiratory, urologic and digestive diseases.